

REMARKS

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, claims 4, 8 and 11 have been cancelled, while claims 1, 5, 9 and 10 have been amended to include the limitations of cancelled claim 4.

The Examiner has rejected claims 1, 2, 4-6 and 8-10 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,933,798 to Linnartz in view of U.S. Patent 6,222,932 To Rao et al. The Examiner has further rejected claims 3 and 7 under 35 U.S.C. 103(a) as being unpatentable over Linnartz in view of Rao et al., and further in view of U.S. Patent 5,260,648 to Brust.

The Linnartz patent discloses detecting a watermark embedded in an information signal, in which the embedding of a watermark is described with reference to Fig. 1 therein. In particular, "The arrangement comprises a watermark data signal generator 11 which generates a predetermined watermark data signal $w_i(n)$ for each watermark W_i ." (col. 2, lines 18-21). As described at col. 2, lines 15-18, "The watermark can be a code which uniquely identifies the owner of the copyright. It can also be a text string or simply a binary coded number. Accordingly, there is a finite set of different watermarks W_i ." As should be apparent from examining Fig. 1, the particular watermark W_i used in watermarking the image signal $p(n)$ is pre-selected and applied to the watermark data

signal generator 11, which generates the associated watermark data signal which is added to the image signal $p(n)$ in adder 12.

The Rao et al. patent discloses automatic adjustment of image watermark strength based on computed image texture, in which the texture in an image is computed, from a previously determined model relating watermark intensity to image texture, a watermark intensity is determined based on the computed texture, the intensity of a watermark is adjusted accordingly, and the image is watermarked with the intensity-adjusted watermark.

In the subject invention, as claimed in claims 1 and 9, a given property of the information signal to be watermarked is analyzed and an actual value of the given property is determined. In addition, different sets of basic watermark patterns in a plurality of sets of basic watermark patterns are associated with distinct values of the given property, each set of basic watermark patterns being a combination of two or more basic watermark patterns. Finally, the set of basic watermark patterns from the plurality of sets of basic watermark patterns which is associated with the actual value of the property is selected for watermarking the information signal. A result of this is, over the course of time, the embedded set of basic watermark patterns changes, and as such, a plurality of sets of basic watermark patterns are used, depending on the actual value of the given property of the information signal.

Applicants submit that while Rao et al. discloses varying the intensity of a watermark based on image texture, which may arguably be deemed selecting one out of a plurality of watermarks, there is no disclosure or suggestion in Rao et al. that the plurality of watermarks is, in fact, a plurality of sets of basic watermark patterns, and that the selected watermark is one of the sets of basic watermark patterns, wherein the embedding process embeds the set of basic watermark patterns. This is described in the Substitute Specification on page 9, paragraph [0025] in which the set of basic watermark patterns are tiled over the image by a tiling circuit.

The Brust patent discloses a process and system for rapid analysis of the spectrum of a signal at one or several points of measuring, in which, arguably, the shape of a frequency spectrum of an audio signal is detected.


Applicants submit, however, that the combination of this feature with Linnartz and Rao et al. is meaningless with respect to the subject invention, in that neither Brust nor Linnartz nor Rao et al. disclose or suggest that this should be the property of the input signal to be analyzed, "associating different sets of basic watermark patterns in a plurality of sets of basic watermark patterns with distinct values of said property, each set of basic watermark patterns being a combination of two or more basic watermark patterns", and "selecting the set of basic watermark

patterns from said plurality of sets of basic watermark patterns associated with said actual value for embedding in the information signal".

In view of the above, Applicants believe that the subject invention, as claimed, is not rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1-3, 5-7, 9 and 10, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

by 
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